AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for determining the minimal cost path between two points (A,B), via a transport network comprising a plurality of nodes (P_n) which are connected in pairs by segments, the method comprising the steps of:

attributing a cost to each segment of the network;

developing two path graphs, substantially starting from two points (A,B);

interrupting the development of the two path graphs when they comprise at least one first common interference node (P_i);

determining two minimal cost paths belonging respectively to the two path graphs; and

connecting said two minimal cost paths in order to obtain a minimal cost path connecting the said two points (A,B),

wherein the segments are classified according to a plurality of network levels;

during the development of at least one of two graphs, the number of segments of the graph of a lowest level m_{inf} is calculated; and

starting from a predefined threshold of number of segments of level m_{inf}, said at least one of the two path graphs is developed taking into account only the segments which belong to the levels which are strictly higher than the level m_{inf},

wherein a group of successive segments with a given level m is sought, each group comprising exclusively intermediate nodes which do not belong to any other segment with a level which is at least equal to m; and

the group of successive segments having the given level m is substituted by a single segment with the given level m.

2. (Previously presented) Method according to claim 1, wherein, in the case when at least one of said two points (A,B) is situated substantially at the location of a node, the path graph corresponding to said at least one of said two points is developed starting from the said node.

3. (Previously presented) Method according to claim 1, wherein, for at least one of said two points (A,B), at least two adjacent nodes ($P_{A,n}$, $P_{A,n+1}$) of the said at least one (A) of said two points are sought, a non-zero basic cost is attributed to each of these two nodes ($P_{A,n}$, $P_{A,n+1}$), and a single graph is developed starting from these two nodes ($P_{A,n}$, $P_{A,n+1}$).

4. (Previously presented) Method according to claim 3, wherein since the two nodes ($P_{A,n}$, $P_{A,n+1}$) form a segment on which the at least one (A) of said two points is substantially situated, a basic cost of each node ($P_{A,n}$, $P_{A,n+1}$) is determined by proportionality starting from the cost of the segment between these two nodes ($P_{A,n}$, $P_{A,n+1}$).

5. (Cancelled)

6. (Currently amended) Method according to claim [[5]]<u>1</u>, wherein:

during the development of the two path graphs, the number of segments of each graph of ~~the~~ <u>a</u> lowest level m_{inf} is calculated; and

when the number of segments of level m_{inf} has reached said predefined threshold for the two path graphs, the development of the two graphs is continued, taking into account only the segments which belong to the levels which are strictly higher than the level m_{inf}.

7. (Currently amended) Method according to claim [[5]]<u>1</u>, wherein the development of said at least one of the two path graphs is started by taking into account each of the segments which belong to ~~all~~ <u>any</u> of the levels of the network.

8. (Previously presented) Method according to claim 1, wherein:

a group of successive segments with a given level m is sought, comprising exclusively intermediate nodes which do not belong to any segment with a level which is at least equal to m, other than those of the group of successive segments with the level m concerned; and

the group of successive segments is substituted by a single segment with a level m.

9. (Currently amended) A method for determining the minimal cost path between two points (A,B), via a transport network comprising a plurality of nodes (P_n) which are connected in pairs by segments, the method comprising the steps of:

attributing a cost to each segment of the network;

developing two path graphs, substantially starting from two points (A,B);

interrupting the development of the two path graphs when they comprise at least one first common interference node (P_i);

determining two minimal cost paths belonging respectively to the two path graphs; and

connecting said two minimal cost paths in order to obtain a minimal cost path connecting the said two points (A,B).

~~Method according to claim 1,~~ wherein each graph is developed in a globally concentric manner.

10. (Previously presented) Method according to claim 9, wherein the said two path graphs are developed by using a bucket algorithm.

11. (Previously presented) Method according to claim 1, wherein the said two path graphs are developed simultaneously.

12. (Previously presented) Method according to claim 1, wherein, having found the said first common interference node (P_i), an optimal interference node (P_{io}) is sought from amongst the nodes already analysed, in order to determine two minimal cost paths which contain said optimal interference node (P_{io}).

13. (Previously presented) Road navigation aid server for implementation of the method according to claim 1, comprising an interface for connection to a communication network, a block for receipt of requests from client terminals, a block for receipt of road network data, a block for classification of road segments, a block for creation of a virtual road network, a block for labelling of road segments, a calculation module and a transmission block.

14. (Previously presented) Server according to claim 13, wherein the calculation module comprises a graph development block, a block for detection of a change of level of segments, and a block for determination of the minimal cost path.